## Transformations of Parent $F \mathrm{~N}_{\text {ctions Activity }}$

Classify each function according to the parent function by matching the cards. Describe the transformations that have occurred for each function by writing the description on the back of the function card.

| $f(x)=x+5$ | Linear |
| :---: | :---: |
| $f(x)=3 x^{2}-2$ | Quadratic |
| $f(x)=-x^{3}$ | Cubic |
| $f(x)=\sqrt{x+8}$ | Square Root |
| $f(x)=(x-4)^{2}+2$ | Parabola |
| $f(x)=(3 x)^{2}$ | Second Degree Polynomial |
| $f(x)=\frac{1}{x}-5$ |  |


| $f(x)=5 \sqrt{x}$ | Radical |
| :---: | :---: |
| $f(x)=\|x-2\|-6$ | Absolute Value |
| $f(x)=\frac{1}{3} x$ | First Degree Polynomial |
| $f(x)=\sqrt[3]{x+1}$ |  |
| $f(x)=2(x-4)^{2}+7$ |  |
| $f(x)=\frac{1}{x+2}-4$ |  |

